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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,314	11/20/2003	Masahiro Kawano	9448-148US (G0303US)	9762
570	7590	06/08/2005	EXAMINER	
AKIN GUMP STRAUSS HAUER & FELD L.L.P.			CHEN, SOPHIA S	
ONE COMMERCE SQUARE			ART UNIT	
2005 MARKET STREET, SUITE 2200			PAPER NUMBER	
PHILADELPHIA, PA 19103			2852	

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,314

Applicant(s)

KAWANO, MASAHIRO

Examiner

Sophia S. Chen

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 4 and 6-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/20/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/20/03 & 5/3/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: R1, R3, R4, R5, R6, R7 (Figure 3), DI (Figure 7), and Va (Figure 9). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Idta (page 19, line 2, etc.). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "A" has been used to designate both "a point" (page 21, line 29; Figures 2 and 9) and "a current" (Figures 2 and 9). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The disclosure is objected to because of the following informalities:

- a. Page 1, line 16, "cartridge 3" should be "roller 3".
- b. Page 21, line 32, "3" should be "13".
- c. Page 21, last line, "8" should be "7".

Appropriate correction is required.

Claim Objections

7. Claims 1-9 are objected to because of the following informality:

- a. Claim 1, lines 10-11, "develop-supplying" should be "developer-supplying".
- b. Claim 2, last line, "surface said" should be "surface of said".
- c. Claim 3, line 3, "lest" should be "least".

Appropriate correction is required.

Claim Rejections – 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Kishimoto (JP 07-271139 A).

Kishimoto discloses an image forming apparatus, comprising: a photoconductive body 1 on which an electrostatic latent image can be formed; a developing member 21 that causes developer 71 to adhere to the electrostatic latent image to develop the

electrostatic latent image (paragraph [0023]); a developer-supplying member 73 that supplies the developer 71 to the developing member 21 (Figure 1); a current measuring section 80 that measures a current flowing through the developing member 21 (abstract and Figure 1); a voltage-setting section 90 that sets at least one of the developing member 21 and the developer-supplying member 73 to a corresponding one of first voltages, the first voltages being set in timed relation with development of the electrostatic latent image (abstract and paragraphs [0028] and [0029]); and the current being measured in a image forming mode where an electrostatic latent image is formed on a substantially entire surface of the photoconductive body 1 (paragraphs [0003], [0004], and [0028]).

10. Claims 1, 3, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiraoka et al. (US Pat. No. 5,365,318).

The patent discloses an image forming apparatus, comprising: a photoconductive body 10 on which an electrostatic latent image can be formed; a developing member 1 that causes developer to adhere to the electrostatic latent image to develop the electrostatic latent image (column 3, line 66 to column 4, line 2 and Figure 1); a developer-supplying member 2 that supplies the developer to the developing member 1 (Figure 1); a current measuring section that measures a current flowing through the developer-supplying member 2 (inherently; column 12, lines 13-22); a voltage-setting section that sets at least one of the developing member 1 and the developer-supplying member 2 to a corresponding one of first voltages, the first voltages being set in timed relation (not only before but also during the image forming process) with development of

the electrostatic latent image (column 12, lines 45-66); the current being measured in both the non-image forming mode and in the solid-image forming mode (column 12, lines 21-22 and 45-66).

Allowable Subject Matter

11. Claims 4 and 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ono et al. (US Pat. No. 4,947,211) discloses an image forming apparatus comprising a photoconductive member; a developing member; a developer-supplying member; a current measuring section that measures a current flowing through the developer-supplying member; and a voltage-setting section.

Folkins (US Pat. No. 5,034,775) discloses an image forming apparatus comprising a photoconductive member; a developing member; a developer-supplying member; a current measuring section that measures a current flowing through the developing member; a voltage-setting section; and the current being measured when the latent image is not being developed.

Kumasaka et al. (US Pat. No. 5,832,350) discloses an image forming apparatus comprising a photoconductive member; a developing member; a developer-supplying

member; and a current measuring section that measures a current flowing through the developer-supplying member.

Kin et al. (US Pat. Pub. No. US 2002/0009304 A1) discloses an image forming apparatus comprising a photoconductive member; a developing member; a developer-supplying member; a current measuring section that measures a current flowing through the developer-supplying member.

Nakagawa (US Pat. No. 6,871,035 B2) discloses an image forming apparatus comprising a photoconductive member; a developing member; a developer-supplying member; a current measuring section that measures a current flowing through the developer-supplying member; and a voltage-setting section.

Kawashima et al. (JP 06-149029 A) discloses an image forming apparatus comprising a photoconductive member; a developing member; a developer-supplying member; and a current measuring section that measures a current flowing through the developer-supplying member.

Umeno (JP 2000-206766 A) discloses an image forming apparatus comprising a photoconductive member; a developing member; a developer-supplying member; a current measuring section that measures a current flowing through the developing member; and a voltage-setting section.


Takagi et al. (JP 2001-117367 A) discloses an image forming apparatus comprising a photoconductive member; a developing member; a developer-supplying member; and a current measuring section that measures a current flowing through the developer-supplying member.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sophia S. Chen whose telephone number is (571) 272-2133. The examiner can normally be reached on M-F (7:00-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sophia S. Chen
Primary Examiner
Art Unit 2852

Ssc
June 6, 2005